

ANAGALLIS ARVENSIS AND CAERULEA IN VERMONT.

ALICE E. BACON.

IN the summer of 1898 the writer of this note was told of a "pink chick weed" to be found on a terrace near her home. On investigating the matter she found a few scattered plants of *Anagallis arvensis* in that locality, and a few days later a single plant was found in a bed of pansies north of her house and two more in the lawn. Specimens were placed in her herbarium with date—July 28, 1898, and full notes.

Noticing a few weeks ago that the plant was not credited to Vermont in Mr. E. F. Williams' list in RHODORA for January she sent part of the herbarium specimen to Prof. L. R. Jones of Burlington, for identification, with the promise of fresh flowers if possible.

A few days later a lusty plant was found in a row of sweet peas, in ground that has been closely cultivated for years. Search was immediately made in the places where it had been found before and the plant was found in abundance on the terrace and nowhere else. It had increased in four years from a few plants to many hundreds, spreading the whole length of a high terrace, checked on the north only by the highway and on the south by cultivated land.

Specimens were sent to the Herbarium at Burlington and also to Mr. Williams. Growing with the *A. arvensis* were several plants bearing blue blossoms, which Prof. Jones identifies as *A. caerulea*; the plants are few as compared with the *A. arvensis* but both are evidently increasing rapidly and are thoroughly established. Although in the heart of the village the rather inconspicuous blossom and its habit of closing early and in cloudy weather has probably preserved it from destruction.

Still more recently *A. arvensis* has been reported from several places in this vicinity. Attention of flower-lovers was called to the plant, and several specimens were found in a strawberry patch on a farm about a mile distant from the first recorded station and brought for identification. Single plants were also gathered a mile or two from the village in different directions; they were smaller, less vigorous and fewer-flowered. The plant evidently has been spreading in

this section and probably will soon be reported from other places in the Connecticut Valley, Vermont side. Specimens of *A. arvensis* will gladly be forwarded to any Vermont reader of RHODORA upon application to the writer of this note. *A. caerulea* has not been reported except from the terrace of which mention has been made.

BRADFORD, VERMONT.

ASTER UNDULATUS × NOVI-BELGII.

M. L. FERNALD.

IN October, 1900, Miss E. L. Shaw called my attention to an *Aster* found by her in a sandy thicket at Carlisle, Massachusetts, which presented a perplexing combination of the characters of *A. undulatus* and *A. Novi-Belgii*. Early in October, 1901, Miss Shaw showed me the spot where the *Aster* occurs, but, unfortunately, in the widening of the road much of the thicket had been temporarily destroyed and the tops at least of the *Aster* removed. However, roots of a plant which had been transplanted to Miss Shaw's garden furnished material which, in connection with that collected in 1900, shows very well the characteristics of the plant. In the neighborhood of the original station in Carlisle *A. undulatus* is abundant on the dry banks, while typical *A. Novi-Belgii* with strongly squarrose involucre covers extensive areas of meadow. The intermediate plant of the sandy roadside thicket has the pubescence of *A. undulatus*; and the leaves though less clasping, scarcely constricted at the base, and narrower than in *A. undulatus*, have the texture of that species, while they are shorter, broader and more toothed than in *A. Novi-Belgii*. In its branching the plant simulates *A. undulatus* more than *A. Novi-Belgii*. The involucre, however, is more often composed of strongly squarrose herbaceous bracts as in the most extreme form of *A. Novi-Belgii*. In some heads, nevertheless, the bracts are firm and appressed-ascending as in *A. undulatus*. All attempts to place this plant with either of the species to which it is closely related have led to the conclusion that it is equally close to the other. The limited area of the plant, its proximity to the abundant *A. undulatus* and *A. Novi-Belgii* and its decided mingling of the characteristics of these two very dissimilar species indicate that the plant is of hybrid origin. Its chief characters are: